# **Accounting Equation**

#### MEANING OF KEY TERMS USED IN THE CHAPTER

1. Accounting Equation

Accounting Equation shows the relationship among capital, liabilities and assets. Total assets are equal to the sum of capital and liabilities.

Mathematical Expression of Accounting Equation:

(i) Assets = Liabilities + Capital; or

(ii) Capital = Assets - Liabilities; or

(iii) Liabilities = Assets - Capital

2. Assets

Assets are the resources that the business owns. They refer to properties or legal rights owned by the business, which can be measured in terms of money.

3. Liabilities

Liabilities are the financial obligations of an enterprise. In common parlance, it refers to financial obligations of the enterprise other than capital of the owners.

4. Capital

Capital is the amount invested by the owner in the business. It increases by the profit earned during the year and decreases by the loss incurred during the year and drawings made.

Or

Capital is the excess of assets over external liabilities, *i.e.*, Capital = Assets – Liabilities.

### **CHAPTER SUMMARY**

• **Accounting Equation** is the basis for Double Entry System of Book Keeping. Total assets of the business firm are provided by the creditors/lenders and the owners. Therefore, at any point of time, the total assets of a business are equal to its total liabilities. Liabilities to the outsiders are known as **liabilities** but liability to the owners, in accounting is referred to as **capital**.

We can express the relationship that exists among assets, liabilities and capital in the form of an accounting equation as follows:

Total Assets = Total Liabilities

Or

Total Assets = Liabilities + Capital

Or

Capital = Total Assets – Liabilities

## **Solved Questions**

#### Illustration 1.

X has following assets and liabilities as on 31st March, 2020. Ascertain his capital.

Cash ₹ 25,000; Bank ₹ 47,500; Debtors ₹ 18,000; Creditors ₹ 22,000; Plant and Machinery ₹ 80,000; Building ₹ 2,00,000; Furniture ₹ 24,000; Bills Receivable ₹ 56,500; Bills Payable ₹ 23,500.

Or

Capital = Assets – Liabilities

= (Cash + Bank + Debtors + Plant and Machinery + Building + Furniture + Bills Receivable) – (Creditors + Bills Payable)

= ₹ (25,000 + 47,500 + 18,000 + 80,000 + 2,00,000 + 24,000 + 56,500) - ₹ (22,000 + 23,500)

= ₹ 4,51,000 - ₹ 45,500 = ₹ 4,05,500

#### Illustration 2.

Show the effect of following transactions on the accounting equation:

- (i) Ram commenced business with cash ₹ 15,00,000, Bank Balance ₹ 7,50,000 and Bank Loan ₹ 2,00,000.
- (ii) Purchased Car for ₹ 1,30,000 by paying ₹ 85,000 in cash and balance at a later date.
- (iii) Purchased 300 chairs @ ₹ 700 each from XYZ Ltd.
- (iv) Purchased 2 tables @ ₹ 5,000 each to be used in his showroom and paid by cheque.
- (v) Payment made to XYZ by cheque in full settlement after receiving 20% discount.
- (vi) Paid commission ₹ 24,000. 20% is for current year.

**Solution:** Refer to Page No. 6.3.

#### Illustration 3.

Show the effect of following transactions on the accounting equation:

- (i) Mr. *Y* started business with cash ₹ 4,00,000, Machinery ₹ 25,000, Furniture ₹ 15,000 and a loan of ₹ 1,75,000.
- (ii) He purchased goods of ₹ 1,00,000 from M/s XYZ. Traders who are willing to give cash discount of 5%, if payment was made within 1 month.
- (iii) Furniture is now valued at 75%.
- (iv) Sold goods of list price ₹ 20,000 at a profit of  $33\frac{1}{3}$ % on cost price to Mr. Aman. He accepted a bill for 1/5th of the amount due and paid the remaining amount.
- (v) Purchased Investment (Personal) of ₹ 5,000.
- (vi) Paid instalment of Loan of ₹ 25,000 including interest on Loan of ₹ 3,000.
- (vii) Paid Life Insurance premium for 8 months of ₹ 16,000.
- (viii) Paid rent ₹ 15,000 and security deposit to landlord ₹ 50,000.
- (ix) Charge interest on drawings ₹ 4,000.

**Solution:** Refer to Page No. 6.4.

**Solution:** Refer to Illustration 2 on Page No. 6.2.

Transactions						Ass	ets					=			Liabilitie	s + C	Capital		
No.	Cash	+	Bank	+	Car	+	Chairs	+	Tables	+	Prepaid	=	Bank Loan	+	Creditor	+	XYZ Ltd.	+	Capital
	₹		₹		₹		₹		₹		Comm. (₹)		₹		for Car (₹)		₹		₹
(i)	15,00,000	+	7,50,000	+	0	+	0	+	0	+	0	=	2,00,000	+	0	+	0	+	20,50,000
(ii)	(85,000)	+	0	+	1,30,000	+	0	+	0	+	0	=	0	+	45,000	+	0	+	0
New Equation	14,15,000	+	7,50,000	+	1,30,000	+	0	+	0	+	0	=	2,00,000	+	45,000	+	0	+	20,50,000
(iii)	0	+	0	+	0	4	2,10,000	+	0	+	0	=	0	+	0	+	2,10,000	+	0
New Equation	14,15,000	+	7,50,000	+	1,30,000	+	2,10,000	+	0	+	0	=	2,00,000	+	45,000	+	2,10,000	+	20,50,000
(iv)	0	+	(10,000)	+	0	+	0	+	10,000	+	0	=	0	+	0	+	0	+	0
New Equation	14,15,000	+	7,40,000	+	1,30,000	+	2,10,000	+	10,000	+	0	=	2,00,000	+	45,000	+	2,10,000	+	20,50,000
(v)	0	+	(1,68,000)	+	0	+	0	+	0	+	0	=	0	+	0	+	(2,10,000)	+	42,000
New Equation	14,15,000	+	5,72,000	+	1,30,000	+	2,10,000	+	10,000	+	0	=	2,00,000	+	45,000	+	0	+	20,92,000
(vi)	(24,000)	+	0	+	0	+	0	+	0	+	19,200	_	0	+	0	+	0	+	(4,800)
New Equation	13,91,000	+	5,72,000	+	1,30,000	+	2,10,000	+	10,000	+	19,200		2,00,000	+	45,000	+	0	+	20,87,200

**Solution:** Refer to Illustration 3 on Page No. 6.2.

Transactions						Asse	ts					=		Lial	oilities + Capita	al	
No.	Cash	+	Machinery ₹	+	Furniture ₹	+	Stock ₹	+	B/R ₹	+	Security Deposit (₹)	=	Loan	+	M/s. XYZ ₹	+	Capital ₹
(i)	4,00,000	+	25,000	+	15,000	+	0	+	0	+	0	=	1,75,000	+	0	+	2,65,000
(ii)	0	+	0	+	0	+	1,00,000	+	0	+	0	=	0	+	1,00,000	+	0
New Equation	4,00,000	+	25,000	+	15,000	+	1,00,000	+	0	+	0	=	1,75,000	+	1,00,000	+	2,65,000
(iii)	0	+	0	+	(3,750)	+	0	+	0	+	0	=	0	+	0	+	(3,750)
New Equation	4,00,000	+	25,000	+	11,250	+	1,00,000	+	0	+	0	=	1,75,000	+	1,00,000	+	2,61,250
(iv)	16,000	+	0	+	0	+	(15,000)	+	4,000	+	0	=	0	+	0	+	5,000
New Equation	4,16,000	+	25,000	+	11,250	+	85,000	+	4,000	+	0	=	1,75,000	+	1,00,000	+	2,66,250
(v)	(5,000)	+	0	+	0	+	0	+	0	+	0	=	0	+	0	+	(5,000)
New Equation	4,11,000	+	25,000	+	11,250	+	85,000	+	4,000	+	0	=	1,75,000	+	1,00,000	+	2,61,250
(vi)	(25,000)	+	0	+	0	+	0	+	0	+	0	=	(22,000)	+	0	+	(3,000)
New Equation	3,86,000	+	25,000	+	11,250	+	85,000	+	4,000	+	0	=	1,53,000	+	1,00,000	+	2,58,250
(vii)	(16,000)	+	0	+	0	+	0	+	0	•	0	=	0	+	0	+	(16,000)
New Equation	3,70,000	+	25,000	+	11,250	+	85,000	+	4,000	+	0	=	1,53,000	+	1,00,000	+	2,42,250
(viii)	(15,000)	+	0	+	0	+	0	+	0	+	0	=	0	+	0	+	(15,000)
	(50,000)	+	0	+	0	+	0	+	0	+	50,000	=	0	+	0	+	0
New Equation	3,05,000	+	25,000	+	11,250	+	85,000	+	4,000	+	50,000	= (	1,53,000	+	1,00,000	+	2,27,250
	0	+	0	+	0	+	0	+	0	+	0	=	0	+	0	+	4,000
(ix)	0	+	0	+	0	+	0	+	0	+	0	=	0	+	0	+	(4,000)
New Equation	3,05,000	+	25,000	+	11,250	+	85,000	+	4,000	+	50,000	=	1,53,000	+	1,00,000	+	2,27,250

Accounting Equation 6.5

#### Illustration 4.

Show the accounting equation on the basis of the following transactions and also the Balance Sheet of Mr. Rahul:

- (i) Commenced business with cash ₹ 2,00,000.
- (ii) Purchased goods from Ms. Neha ₹ 50,000.
- (iii) Withdrew goods costing ₹ 10,000 for personal use.
- (iv) Sold goods for cash (cost ₹ 35,000) ₹ 60,000.
- (v) Introduced fresh capital 50,000.
- (vi) Paid telephone bills amounting to ₹ 3,000.
- (vii) Goods costing ₹ 2,000 sold at a profit of 25% on cost.
- (viii) Motorcycle purchased for personal use ₹ 18,000.
- (ix) Paid Rent ₹ 18,000.
- (x) Paid Salaries ₹ 12,000.

Solution: Refer to Page No. 6.6.

# **Advanced Level Question**

#### Illustration 5.

Use Accounting Equation to show the effect of following transactions on assets, liabilities and capital and also show the Balance Sheet:

#### **Transactions**

- (i) Mohan started business with cash of ₹ 3,60,000, Goods ₹ 1,00,000, Debtors ₹ 20,000, Furniture ₹ 20,000 and Creditors ₹ 40,000.
- (ii) Goods costing ₹ 12,000 sold to Ram at a loss of 10%, out of which ₹ 4,000 received in cash.
- (iii) Cash deposited into bank ₹ 40,000.
- (iv) Outstanding Rent ₹ 10,000.
- (v) Received cheque from Ram ₹ 6,400 in full settlement of ₹ 6,800. Cheque deposited on the same date.
- (vi) Prepaid Insurance ₹ 2,000.
- (vii) Paid to creditors ₹ 36,000 by cheque in full settlement of their accounts.
- (viii) Depreciation on Furniture @ 10%.
- (ix) Unearned Commission ₹ 4,000.

**Solution:** Refer to Page Nos. 6.7 and 6.8.

**Solution:** Refer to Illustration 4 on Page No. 6.5.

No.	Transactions		Asset	s	=	Liabilities	+	Capital
		Cash	+	Stock	=	Ms. Neha (Creditor)	+	Capital
		₹		₹		₹		₹
1.	Started business							
	with cash	2,00,000	+	0	=	0	+	2,00,000
2.	Purchased goods from							
	Ms. Neha	0	+	50,000	=	50,000	+	0
	New Equation	2,00,000	+	50,000	=	50,000	+	2,00,000
3.	Withdrew goods for							
	personal use	0	+	(10,000)	=	0	+	(10,000)
	New Equation	2,00,000	+	40,000	=	50,000	+	1,90,000
4.	Sold goods for cash	60,000	+	(35,000)	=	0	+	25,000
	New Equation	2,60,000	+	5,000	=	50,000	+	2,15,000
5.	Introduced fresh capital	50,000	+	0	7	0	+	50,000
	New Equation	3,10,000	+	5,000	=	50,000	+	2,65,000
6.	Paid telephone bills	(3,000)	+	0	3 0	0	+	(3,000)
	New Equation	3,07,000	+	5,000	=	50,000	+	2,62,000
7.	Goods goods at a profit			1				
	of 25% on cost	2,500	+	(2,000)	=	0	+	500
	New Equation	3,09,500	+	3,000	=	50,000	+	2,62,500
8.	Purchased motorcycle							
	for personal use	(18,000)	+	0	=	0	+	(18,000)
	New Equation	2,91,500	+	3,000	=	50,000	+	2,44,500
9.	Paid rent	(18,000)	+	0	=	0	+	(18,000)
	New Equation	2,73,500	+	3,000	=	50,000	+	2,26,500
10.	Paid Salaries	(12,000)	+	0	=	0	+	(12,000)
	New Equation	2,61,500	+	3,000	=	50,000	+	2,14,500

#### **BALANCE SHEET OF RAHUL**

as at ...

Liabilities	₹	Assets	₹
Capital	2,14,500	Cash	2,61,500
Ms. Neha (Creditor)	50,000	Stock	3,000
	2,64,500		2,64,500

**Solution:** Refer to Illustration 5 on Page No. 6.5.

Transactions						Asse	ts					=			Liabil	itie	s + Capital		
No.	Cash ₹	+	Stock ₹	+	Furniture ₹	+	Debtors ₹	+	Prepaid Insu. (₹)	+	Bank ₹	=	Creditors (₹)	+	Unearned Comm. (₹)	+	Outstanding Rent (₹)	+	Capital ₹
(i)	3,60,000	+	1,00,000	+	20,000	+	20,000	+	0	+	0	=	40,000	+	0	+	0	+	4,60,000
(ii)	4,000	-	12,000	+	0	+	6,800	+	0	+	0	=	0	+	0	+	0	-	1,200 (Loss)
<b>New Equation</b>	3,64,000	+	88,000	+	20,000	+	26,800	+	0	+	0	=	40,000	+	0	+	0	+	4,58,800
(iii)	-40,000	+	0	+	0	+	0	+	0	+	40,000	=	0	+	0	+	0	+	0
New Equation	3,24,000	+	88,000	+	20,000	+	26,800	+	0	+	40,000	=	40,000	+	0	+	0	+	4,58,800
(iv)	0	+	0	+	0	+	0	+	0	+	0	=	0	+	0	+	10,000	-	10,000
<b>New Equation</b>	3,24,000	+	88,000	+	20,000	+	26,800	+	0	+	40,000	=	40,000	+	0	+	10,000	+	4,48,800
(v)	0	+	0	+	0	-	6,800	+	0	+	6,400	=	0	+	0	+	0	-	400
New Equation	3,24,000	+	88,000	+	20,000	+	20,000	+	0	+	46,400	=	40,000	+	0	+	10,000	+	4,48,400
(vi)	-2,000	+	0	+	0	+	0	±	2,000	+	0	=	0	+	0	+	0	+	0
New Equation	3,22,000	+	88,000	+	20,000	+	20,000	+	2,000	+	46,400	=	40,000	+	0	+	10,000	+	4,48,400
(vii)	0	+	0	+	0	+	0	+	0		36,000	=	-40,000	+	0	+	0	+	4,000
New Equation	3,22,000	+	88,000	+	20,000	+	20,000	+	2,000	+	10,400	=	0	+	0	+	10,000	+	4,52,400
(viii)	0	+	0	-	2,000	+	0	+	0	+	0	9	0	+	0	+	0	-	2,000
New Equation	3,22,000	+	88,000	+	18,000	+	20,000	+	2,000	+	10,400	F	0	+	0	+	10,000	+	4,50,400
(ix)	4,000	+	0	+	0	+	0	+	0	+	0	1	0	+	4,000	+	0	+	0
New Equation	3,26,000	+	88,000	+	18,000	+	20,000	+	2,000	+	10,400	=	0	7+	4,000	+	10,000	+	4,50,400

## BALANCE SHEET

as at ...

Liabilities	₹	Assets	₹
Unearned Commission	4,000	Cash	3,26,000
Outstanding Rent	10,000	Debtors	20,000
Capital	4,50,400	Stock	88,000
		Prepaid Insurance	2,000
		Bank	10,400
		Furniture	18,000
	4,64,400		4,64,400

#### Illustration 6.

Show the accounting equation on the basis of the following transactions and also show the Balance Sheet: ₹

1.	Commenced business with cash ₹ 5,00,000, Goods ₹ 1,00,0	000	1
	and Furniture ₹ 10,000.		

2.	Sold goods to Rakesh on credit costing ₹ 4,000 for	5,000
3.	Paid rent in advance	5,000
4.	Salary outstanding	1,000
5.	Charge depreciation on furniture	1,000
6.	Goods destroyed by fire	5,000
7.	Purchased household goods for ₹ 1,50,000, giving ₹ 50,000 in cash	
	and balance through a loan	
8.	Accrued Interest	5,000
9.	Commission received in Advance	10,000
10.	Interest due but not paid	1,000
11.	Prepaid Insurance	7,000
12.	Creditors accepted a bill for	15,000
13.	Interest on Capital	10,000
14.	Interest on Drawings	3,000
15.	Transfer from capital to loan	50,000

Use the following headings in equation:

 $\label{eq:cash-stock-def} Cash + Stock + Debtors + Furniture + Prepaid Expenses + Accrued Income = Unearned \\ Commission + Loan + Bills Payable (B/P) + Outstanding Expenses (O/s Expenses) + Capital.$ 

## **Solution:**

Transaction						Asse	ts					=		Liabilities + Capital							
No.	Cash ₹	+	Stock ₹	+	Debtors ₹	+	Furniture ₹	+	Prepaid Exp. (₹)	+	Accrued Int. (₹)	=	Unearned Comm. (₹)	+	Loan ₹	+	B/P ₹	+	Outstandi Exp. (₹)	9	Capital (₹)
1.	5,00,000	+	1,00,000	+	0	+	10,000	+	0	+	0	=	0	+	0	+	0	+	0	+	6,10,000
<b>New Equation</b>	5,00,000	+	1,00,000	+	0	+	10,000	+	0	+	0	=	0	+	0	+	0	+	0	+	6,10,000
2.	0	-	4,000	+	5,000	+	0	+	0	+	0	=	0	+	0	+	0	+	0	+	1,000
<b>New Equation</b>	5,00,000	+	96,000	+	5,000	+	10,000	+	0	+	0	=	0	+	0	+	0	+	0	+	6,11,000
3.	-5,000	+	0	+	0	+	0	+	5,000	+	0	=	0	+	0	+	0	+	0	+	0
<b>New Equation</b>	4,95,000	+	96,000	+	5,000	+	10,000	+	5,000	+	0	=	0	+	0	+	0	+	0	+	6,11,000
4.	0	+	0	+	0	+	0	+	0	+	0	=	0	+	0	+	0	+	1,000	-	1,000
<b>New Equation</b>	4,95,000	+	96,000	+	5,000	+	10,000	+	5,000	+	0	=	0	+	0	+	0	+	1,000	+	6,10,000
5.	0	+	0	+	0	-	1,000	<u>}</u>	0	+	0	=	0	+	0	+	0	+	0	_	1,000
New Equation	4,95,000	+	96,000	+	5,000	+	9,000	+	5,000	+	0	=	0	+	0	+	0	+	1,000	+	6,09,000
6.	0	-	5,000	+	0	+	0	+	0	+	0	=	0	+	0	+	0	+	0	-	5,000
New Equation	4,95,000	+	91,000	+	5,000	+	9,000	+	5,000	+	0	=	0	+	0	+	0	+	1,000	+	6,04,000
7.	-50,000	+	0	+	0	+	0	+	0	+	0	=	0	+	1,00,000	+	0	+	0	-	1,50,000
New Equation	4,45,000	+	91,000	+	5,000	+	9,000	+	5,000	+	0	=	0	+	1,00,000	+	0	+	1,000	+	4,54,000
8.	0	+	0	+	0	+	0	<b>_</b>	0	+	5,000	=	0	+	0	+	0	+	0	+	5,000
New Equation	4,45,000	+	91,000	+	5,000	+	9,000	+	5,000	+	5,000	=	0	+	1,00,000	+	0	+	1,000	+	4,59,000
9.	10,000	+	0	+	0	+	0	+	0	4	0	=	10,000	+	0	+	0	+	0	+	0
New Equation	4,55,000	+	91,000	+	5,000	+	9,000	+	5,000	+	5,000	=	10,000	+	1,00,000	+	0	+	1,000	+	4,59,000
10.	0	+	0	+	0	+	0	+	0	+	0	=	0	+	0	+	0	+	1,000	_	1,000
New Equation	4,55,000	+	91,000	+	5,000	+	9,000	+	5,000	+	5,000	=	10,000	+	1,00,000	+	0	+	2,000	+	4,58,000
11.	-7,000	+	0	+	0	+	0	+	7,000	+	0		0	+	0	+	0	+	0	+	0
New Equation	4,48,000	+	91,000	+	5,000	+	9,000	+	12,000	+	5,000	=	10,000	+	1,00,000	+	0	+	2,000	+	4,58,000
12.	0	+	0	+	0	+	0	+	0	+	0	_	0	_	15,000		5,000	+	0	+	0
New Equation	4,48,000	+	91,000	+	5,000 0	+	9,000	+	12,000 0	+	5,000	=	10,000	+	85,000		5,000	+	2,000	+	4,58,000 10,000
13.	0	+	0	+		+	0	+		+	0	=	0	+	0	+	0	+	0	+	10,000
New Equation	4,48,000	+	91,000	+	5,000	+	9,000	+	12,000	+	5,000	=	10,000	+	85,000		5,000	+	2,000	+	4,58,000
14.	0	+	0	+	0	+	0	+	0	+	0	=	0	+	0	+	0	+	0	+	3,000 3,000
<b>New Equation</b>	4,48,000	+	91,000	+	5,000	+	9,000	+	12,000	+	5,000	=	10,000	+	85,000	+1:	5,000	+	2,000	+	4,58,000
15.	0	+	0	+	0	+	0	+	0	+	0	=	0	+	50,000	+	0	+	0	-	50,000
<b>New Equation</b>	4,48,000	+	91,000	+	5,000	+	9,000	+	12,000	+	5,000	=	10,000	+	1,35,000	. 1	5,000	+	2,000	+	4,08,000

# **BALANCE SHEET**

as at ...

Liabilities	₹	Assets	₹
Unearned Commission	10,000	Cash	4,48,000
Bills Payable	15,000	Stock	91,000
Outstanding Expenses	2,000	Debtors	5,000
Loan	1,35,000	Prepaid Expenses	12,000
Capital	4,08,000	Accrued Interest	5,000
		Furniture	9,000
	5,70,000		5,70,000

# **Unsolved Questions**

		Olisolved Questions	
1.	Ragl	hunath had the following transactons in an accounting year:	₹
	(i)	Commenced business with cash	50,000
	(ii)	Paid into bank	10,000
	(iii)	Purchased goods for cash ₹ 20,000 and credit ₹ 30,000.	
	(iv)	Sold goods for cash ₹ 40,000 costing ₹ 30,000.	
	(v)	Rent paid	500
	(vi)	Rent outstanding	100
	(vii)	Bought furniture on credit	5,000
	(viii)	Bought refrigerator for personal use	5,000
	(ix)	Purchased motorcycle for cash	20,000
	Crea	ate an Accounting Equation to show the effect of the above transactions on his assets, lia	bilities and
	capi	tal and also show his Balance Sheet.	
2.	Sho	w an Accounting Equation on the basis of the following transactions:	₹
	(i)	Sunil started business with cash	1,50,000
	(ii)	He purchased a building and furniture for	1,00,000
	(iii)	He purchased goods from Ram on credit	50,000
	(iv)	He paid cartage	500
	(v)	He sold to Shyam on credit goods costing ₹ 6,000 for	9,000
	(vi)	Received rent from tenants	1,000
	(vii)	Received security deposit from tenants	1,500
	(viii)	Purchased stationery for cash	100
	(ix)	Invested in shares (personal)	50,000
	(x)	Received interest in cash	200
	(xi)	Introduced fresh capital	25,000
	(xii)	Goods destroyed by fire	500
3.	Crea	ate an Accounting Equation on the basis of the following transactions:	
	(i)	Commenced business with cash ₹ 50,000, goods ₹ 30,000 and furniture ₹ 20,000.	

- - (ii) Sold goods to Ajay on credit costing  $\stackrel{?}{_{\sim}}$  4,000 for  $\stackrel{?}{_{\sim}}$  5,000.
  - (iii) Sold goods for cash costing ₹ 12,000 for ₹ 16,000.
  - (iv) Purchased goods for cash ₹ 40,000.

Accounting Equation 6.11

- (v) Purchased goods on credit for ₹ 20,000.
- (vi) Paid rent ₹ 3,000 including ₹ 2,000 in advance.
- (vii) Paid salaries ₹ 2,000.
- (viii) Sold goods costing ₹ 8,000 for ₹ 10,000.
- (ix) Salaries outstanding ₹ 1,000.
- (x) Charge depreciation on furniture ₹ 500.
- **4.** Show an Accounting Equation on the basis of the following transactions:
  - (i) D. Mahapatra commenced business with cash ₹ 1,50,000; goods ₹ 60,000; machinery ₹ 1,00,000 and furniture ₹ 50,000.
  - (ii) 1/3rd of the above goods sold at a profit of 10% on cost and half of the payment is received in cash.
  - (iii) Depreciation on machinery provided @ 10%.
  - (iv) Cash withdrawn for personal use ₹ 10,000.
  - (v) Interest on drawings charged @ 5%.
  - (vi) Goods sold to Gupta for ₹ 10,000 and received a Bill Receivable for the same amount for 3 months.
  - (vii) Received ₹ 10,000 from Gupta against the Bills Receivable on its maturity.
- 5. Mr. B.K. Goyal started a real estate agency business with a cash investment of ₹ 3,50,000. Show the impact of following transactions on the Accounting Equation and check whether the equation remains balanced or not:
  - (a) Paid three month's advance rent for office accommodation ₹ 21,000.
  - (b) Bought car for office use ₹ 2,10,000.
  - (c) Purchased office furniture ₹ 70,000.
  - (d) Bought office Laptop from Gupta Tech. & Co. ₹ 30,000.
  - (e) Sold extra office furniture at cost to Mohan for ₹ 10,000. Mohan paid ₹ 6,000 in cash and accepted a bill at three months for the balance.
  - (f) Mohan paid the amount of the bill at maturity and Mr. B.K. Goyal paid half the amount he owed to Gupta Tech. & Co.
  - (g) Collected commission ₹ 60,000.
  - (h) Paid telephone bill amounting to ₹1,500.

## **GUIDE TO ANSWERS**

- 1. Assets—Cash ₹ 34,500 + Bank ₹ 10,000 + Stock ₹ 20,000 + Furniture ₹ 5,000 + Motorcycle ₹ 20,000 = ₹ 89,500; Liabilities—Creditors ₹ 30,000 + Outstanding Rent ₹ 100 + Vendor for Furniture ₹ 5,000 + Capital ₹ 54,400 = ₹ 89,500.
- 2. Assets—Cash ₹ 27,100 + Building & Furniture ₹ 1,00,000 + Stock ₹ 43,500 + Debtor (Shyam) ₹ 9,000 = ₹ 1,79,600; Liabilities—Creditor (Ram) ₹ 50,000 + Security Deposits ₹ 1,500 + Capital ₹ 1,28,100 = ₹ 1,79,600.
- **3.** Assets—Cash₹31,000+Stock₹66,000+Furniture₹19,500+Debtor(Ajay)₹5,000+Prepaid Rent₹2,000=₹1,23,500; Liabilities—Creditor₹20,000+Outstanding Salary ₹1,000+Capital ₹1,02,500 = ₹1,23,500.
  - [**Hint:** In transaction (x), furniture will be reduced by ₹ 500 and capital will also be reduced by ₹ 500 because of loss due to depreciation.]
- **4.** Assets—Cash ₹ 1,61,000 + Stock (goods) ₹ 30,000 + Machinery ₹ 90,000 + Furniture ₹ 50,000 + Debtors ₹ 11,000 = ₹ 3.42.000:

Liabilities—Nil + Capital ₹ 3,42,000 = ₹ 3,42,000.

- [**Hints:** 1. Opening Capital ₹ 3,60,000 = Cash ₹ 1,50,000 + Stock ₹ 60,000 + Machinery ₹ 1,00,000 + Furniture ₹ 50,000.
  - 2. Liabilities: Nil.]
- **5.** Assets—Cash ₹ 1,02,500 + Bill Receivable 0 + Prepaid Rent ₹ 21,000 + Office Car ₹ 2,10,000 + Office Furniture ₹ 60,000 + Office Laptop: ₹ 30,000 = ₹ 4,23,500;

Liabilities—Gupta Tech. & Co.: ₹ 15,000 + Capital—₹ 4,08,500 = ₹ 4,23,500.